Decision **PROPOSED DECISION OF ALJ FARRAR**
(First Mailed 9/26/16) (Revised Mailed 11/14/16)

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Application of San Diego Gas & Electric Company (U902E) for a Certificate of Public Convenience and Necessity for the South Orange County Reliability Enhancement Project.	Application 12-05-020 (Filed May 18, 2012)

DECISION DENYING CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY TO SAN DIEGO GAS & ELECTRIC COMPANY TO IMPROVE RELIABILITY IN ITS SOUTH ORANGE COUNTY TERRITORY

Table of Contents

Title **Page**

DECISION DENYING CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY TO SAN DIEGO GAS & ELECTRIC COMPANY TO IMPROVE RELIABILITY IN ITS SOUTH ORANGE COUNTY TERRITORY

Summary

This decision denies San Diego Gas & Electric Company a certificate of public convenience and necessity for its proposed South Orange County Reliability Enhancement Project, finding instead that no project is necessary based on existing demand forecasts and planning standards. The proceeding is closed.

1. Procedural Background

By this application, San Diego Gas & Electric Company (SDG&E) seeks a certificate of public convenience and necessity (CPCN) to construct the South Orange County Reliability Enhancement Project (SOCRE). The proposed project would rebuild and upgrade the existing aged 138/12-kV Capistrano Substation with a new 230/138/12-kV substation and replace an existing 138-kV transmission line (TL13835) with a new 230-kV double circuit extension between SDG&E's Capistrano and Talega Substations. By adding a new 230-kV double circuit extension, the SOCRE Project will bring a new 230-kV transmission source into South Orange County for increased capacity and reliability. Protests were filed by the Office of Ratepayer Advocates (ORA), the City of San Juan Capistrano (SJC), and Forest Residents Opposing New Transmission Lines (FRONTLINES).

Pursuant to Public Utilities Code (Pub. Util. Code) Section 1001 *et seq.*, SDG&E may not proceed with its proposed project absent certification by the California Public Utilities Commission (Commission) that the present or future public convenience and necessity require it, and such certification shall specify

the maximum prudent and reasonable cost of the approved project. In addition, pursuant to General Order (GO) 131-D, SDG&E may not proceed with its proposed project absent the Commission's determination that the project complies with the California Environmental Quality Act (CEQA)[1] and with the Commission's policies requiring the use of low-cost and no-cost measures to mitigate electric and magnetic field effects.

CEQA requires the lead agency (the Commission in this case) to conduct a review to identify the environmental impacts of the project, and ways to avoid or reduce environmental damage, for consideration in the determination of whether to approve the project, a project alternative, or no project. If the scoping process determines that the proposed project will have a significant environmental impact, then the lead agency shall prepare an environmental impact report (EIR) that identifies the environmental impacts of the proposed project and alternatives, designs a recommended mitigation program to reduce any potentially significant impacts, and identifies, from an environmental perspective, the preferred project alternative. If the agency approves the project, it must require the environmentally superior alternative and identified mitigation measures, unless they are found to be infeasible. The lead agency may not approve a project unless it determines that there are overriding considerations that merit project approval despite its unavoidable environmental impacts.

After the conduct of a prehearing conference on November 19, 2014, the assigned Commissioner issued a scoping memo and ruling on February 23, 2015, determining the issues to be resolved as follows, and setting the schedule for the proceeding:

1. Is there a need for the SOCRE Project? This issue is limited to whether there is a public convenience and necessity for the

[1] CEQA is codified at Public Resources Code § 21000, *et seq.*

benefits that the SOCRE Project might offer, but not whether this particular project is needed to achieve those benefits. This issue encompasses, but is not limited to, the following considerations:

a. Is there a genuine risk of uncontrolled outages for the entire South Orange County load, and if so, is the SOCRE Project necessary to reduce this risk in an appreciable way or are there alternative ways to reduce this risk?

b. Reliability: Is there a genuine risk of a controlled interruption of a portion of the South Orange County load, as SDG&E asserts, and if so, is the SOCRE Project necessary to reduce this risk in an appreciable way or are there alternative ways to reduce this risk?

c. Is the SOCRE Project necessary to comply with mandatory North American Electric Reliability Criteria (NERC), Western Electricity Coordinating Council (WECC), and California Independent System Operator (CAISO) transmission and operations standards or are there other ways to comply with the standards above?

d. What is the projected load growth over the next 10 years in the SOCRE Project area?

e. Is the SOCRE Project necessary to accommodate the projected load growth in the Project area over the next ten years, or are there alternative ways to accommodate this load growth?

2. What are the significant adverse environmental impacts of the SOCRE Project?

3. Are there potentially feasible mitigation measures or SOCRE Project alternatives that will avoid or lessen the significant adverse environmental impacts?

4. As between the SOCRE Project and the SOCRE Project alternatives, which is environmentally superior?

5. Are the mitigation measures or SOCRE Project alternatives infeasible?

6. To the extent that the SOCRE Project and/or alternatives result in significant and unavoidable adverse environmental impacts, are

there overriding considerations that nevertheless merit Commission approval of the SOCRE Project or alternative?

7. Was the EIR completed in compliance with CEQA, did the Commission review and consider the EIR prior to approving the SOCRE Project or an alternative, and does the EIR reflect our independent judgment?
8. Is the SOCRE Project and/or alternative designed in compliance with the Commission's policies governing the mitigation of Electro-Magnetic Field effects using low-cost and no-cost measures?
9. What is the maximum cost of the SOCRE Project, if approved?
10. Does the SOCRE Project design comport with Commission rules and regulations and other applicable standards governing safe and reliable operations?

Evidentiary hearings were held on November 9, 10, 12, 13, 18, 19, and 20, 2015 and December 2, and 3, 2015. The parties filed opening briefs on January 11, 2016, and reply briefs on February 1, 2016, upon which the matter was submitted.

The Commission's Energy Division issued the draft EIR on February 23, 2015, the draft EIR was recirculated on August 10, 2015, and the final EIR was issued on April 25, 2016.

2. Proposed Project Description and Environmental Impacts

The proposed project involves the following main components:[2]

1. Within SDG&E's existing property, build a new 230-kV partially enclosed gas insulated substation at the existing 138/12-kV Capistrano Substation site;[3]
2. Within SDG&E's existing property, relocate, rebuild and expand the existing 138-kV facility with a new partially enclosed gas insulated substation;

[2] SDG&E Application at 4-5.

[3] The Final Environmental Impact Report (FEIR) refers to the newly built substation as the San Juan Capistrano Substation, whereas the existing substation is referred to as the Capistrano Substation. We utilize the same nomenclature.

3. Relocate, rebuild and expand existing 12-kV facilities within SDG&E's existing Capistrano Substation property;

4. Replace an existing 13-kV transmission line (TL13835) with a new 230-kV double-circuit extension between SDG&E's Capistrano and Talega Substations, described as follows:

   - Within SDG&E's existing Rights of Way (ROW) build approximately 7.5 miles of new overhead double-circuit 230-kV transmission lines;
   - Acquire new ROW for approximately 0.25 mile of new overhead 230-kV transmission line adjacent to SDG&E's Talega Substation;
   - Within SDG&E's existing Vista Montana street easement position, replace 0.36 mile of existing 138-kV underground transmission system with one new 230-kV underground transmission line; and
   - Install 0.36 mile in franchise position within Vista Montana Street one 230-kV underground transmission line.

5. Realign existing 69-kV and 138-kV transmission lines near the Talega Substation;

6. Relocate the three existing 138-kV transmission lines from the Capistrano Substation into the new San Juan Capistrano Substation. Loop-in the two 138-kV transmission lines that currently bypass the existing substation into the new San Juan Capistrano Substation. Underground all of the westbound 138-kV transmission line getaways;

7. Install approximately 81 new steel transmission line poles (49 - 230-kV poles, 23 – 138-kV poles, and 9 – 69-kV poles);

8. Remove approximately 86 wood structures/poles, 12 steel poles, and 5 steel lattice towers;

9. Reconfigure the Talega Substation to accommodate the new TL13835 connection; and

10. Undertake other activities required to implement the Proposed Project, including upgrading the communications, controls and relays for corresponding facilities, as required.

The proposed project would have significant and unavoidable impacts on air quality and cultural resources. The proposed project would also have significant impact on the following resources: Aesthetics; Biological Resources; Geology, Soils, and Mineral Resources; Greenhouse Gas Emissions; Hazards and Hazardous Materials; Hydrology and Water Quality; Land Use and Planning; Noise; and Transportation and Traffic; however, implementation of mitigation measures would reduce these impacts to less than significant.

The proposed project spans two air districts, the South Coast Air Quality Management District (SCAQMD) and the San Diego Air Pollution Control District. Emissions from construction activities generated by the proposed project are anticipated to cause localized temporary increases in ambient air pollutant concentrations for which the SCAQMD project region is in nonattainment. Even after mitigation, construction would result in a significant, but temporary, impact on the ambient air quality with respect to reactive organic gases, particulate matter (PM) 10, and PM2.5 emissions.

The proposed project would demolish a former utility structure within the San Juan Capistrano Substation footprint. The former utility structure, as well as the surrounding property, may be determined eligible for listing on the National Register of Historic Places, although at this time it has not been so designated. Therefore, the FEIR finds the proposed project would have significant impacts on a historic cultural resource.

The proposed project would not have any other significant impacts that cannot be mitigated to a less-than-significant level with the mitigation measures identified in the Mitigation Monitoring and Reporting Plan.

3. Project Alternatives

Pursuant to CEQA Guidelines § 15126.6(a), an EIR must consider a reasonable range of alternatives to the project that would feasibly attain most of the basic project objectives while avoiding or substantially lessening any significant effects of the project. An EIR must also evaluate the environmental impacts of a "no project" alternative. (CEQA Guidelines § 15126(e).)

The EIR identifies the following project objectives: (1) Reduce the risk of instances that could result in the loss of power to customers served by the South Orange County 138-kV System through the 10-year planning horizon; (2) Replace inadequate equipment at Capistrano Substation; and (3) Redistribute power flow of the applicant's South Orange County 138-kV System such that operational flexibility is increased. During the screening process two potential alternatives were eliminated for not meeting most or all of the project objectives, not reducing or avoiding one or more of the proposed project's significant effects (or if it did, other effects were significantly increased), or not potentially feasible. The EIR evaluated the following 12 project alternatives, including reduced scope, alternative substation locations and transmission routes, and the No Project alternative:

- Alternative A – No Project.
- Alternative B1 – Reconductor Laguna Niguel–Talega 138-kV Line
- Alternative B2 – Use of Existing Transmission Lines (Additional Talega–Capistrano 138-kV Line).
- Alternative B3 – Phased Construction of Alternatives B1 and B2.
- Alternative B4 – Rebuild South Orange County 138-kV System.
- Alternative C1 – SCE 230-kV Loop-in to Capistrano Substation.
- Alternative C2 – SCE 230-kV Loop-in to Capistrano Substation Routing.

- Alternative D – SCE 230-kV Loop In to Reduced-Footprint Substation at Landfill.
- Alternative E – New 230-kV Talega–Capistrano Line Operated at 138-kV.
- Alternative F – 23-kV Rancho Mission Viejo Substation.
- Alternative G – New 138-kV San Luis Rey–San Mateo Line and San Luis Rey Substation Expansion.
- Alternative J – SCE 230-kV Loop to Trabuco Substation

3.1. Alternative A – No Project

Under the No Project Alternative (Alternative A), it is assumed that none of the components of the proposed project would be constructed. All of the significant impacts from construction and operation of the proposed project would be avoided. It is anticipated that ~~minor~~ maintenance and reconfiguration work would occur as needed to repair or replace failed, poorly configured, or inadequate substation equipment and transmission line facilities. For example, SDG&E is expected to replace 138-kV transformers and update protection equipment at Capistrano Substation ~~and Trabuco~~, and reconfigure the busses and transmission interconnections at Talega Substation,[4] actions it can already pursue without the need for a project under CEQA. Likewise, SDG&E can pursue certain reconductoring ~~activities~~actions to address reliability needs as part of its ongoing maintenance activities. Such maintenance activities are not expected to cause a significant impact as they would be constructed without the need to obtain a CPCN or Permit to Construct from the CPUC pursuant to GO 131-D and CEQA Guidelines Section 15260 et seq. and 15300 et seq. (statutory and categorical exemptions).[5] The No Project Alternative would be environmentally superior in comparison to the proposed project. Significant and unavoidable

[4] FEIR at 3-4.
[5] FEIR at 5-5.

impacts of the proposed project on air quality and cultural resources would be avoided.

3.2. Alternative B1 – Reconductor Laguna Niguel-Talega 138-kV Line, Alternative B2 – Use of Existing Transmission Lines (Additional Talega-Capistrano 138-kV Line), and Alternative B3 – Phased Construction of Alternatives B1 and B2

Under Alternative B1, a new double-circuit 230-kV line would not be installed and the San Juan Capistrano Substation would not be constructed. The use of high-capacity conductor would reduce the number of support structures that would be required to be replaced for 138-kV line reconductoring. The EIR analysis assumed that all of the existing 138-kV structures would be replaced along the section of TL13835 between Capistrano Substation and Talega Substation to allow for reconductoring (approximately 45 transmission line poles). No new distribution line structures would be installed under Alternative B1.[6] The transmission structures installed under Alternative B1 would be smaller than those installed for the proposed project. They would be designed to support a single circuit of a smaller, 138-kV conductor instead of two circuits of a larger 230-kV conductor. In addition, fewer structures would be removed under Alternative B1 than the proposed project.[7]

Under Alternative B2, the proposed San Juan Capistrano Substation would not be constructed, and it is assumed that the same number of transmission structures that would be installed for Alternatives B1 would be installed for Alternative B2. Under Alternative B2, however, 38 distribution line poles would be installed, and distribution line poles would be removed as proposed for the

[6] Under the proposed project, approximately 82 transmission line poles and 10 distribution line poles would be installed.

[7] FEIR at 5-6.

relocation of 12-kV Circuit 315. This distribution line pole work would not be required under Alternative B1. Accounting for the reduced number of transmission line poles to be installed and removed and assuming that the existing Capistrano Substation footprint would remain unchanged, the construction of Alternative B2 would result in approximately 21.5 acres of temporary land disturbance, which would be approximately 28.7 acres fewer than for construction of the proposed project.[8]

Because Alternative B1 and B2 may both be constructed under Alternative B3, it is assumed that the same number of transmission and distribution line poles may be installed as for the proposed project along proposed transmission line Segments 1b and 3. Alternative B3 would result in approximately 6.4 fewer acres of land disturbance than the proposed project because Capistrano Substation would not be expanded and trenching would not be required along proposed transmission line Segment 2 (approximately 1.1 acres of disturbance). In addition, no work would be required along proposed transmission line Segment 1a and at Talega Substation. Less work would be required within the Talega Hub/Corridor because the existing lines would ~~22~~ not need to be relocated to allow for construction of a new 230-kV line.[9]

Alternatives B1, B2, and B3 would result in fewer impacts on air quality than the proposed project; however, this impact would remain significant under Alternatives B1, B2, and B3. Alternatives B1, B2, and B3 would reduce the proposed project's cultural resources and cumulative impacts to less than significant. These alternatives would not increase the capacity of the South

[8] FEIR at 5-8 and 5-9.
[9] FEIR at 5-11.

Orange County 138-kV system as substantially as the proposed project because a new 230-kV source to South Orange County would not be constructed.[10]

3.3. Alternative B4 – Rebuild South Orange County 138-kV System

Under this alternative, substantial construction would occur to reconductor, install new structures, and install new underground conduit along the segments of six 138-kV lines (TL13816, TL13833, TL13834, TL13835, TL13836, and TL13846), see Section 3.2.5, "Alternative B4 – Rebuild South Orange County 138-kV System." New structures and new underground conduit would be installed. In addition, new 138-kV facilities at Capistrano Substation would still be constructed as described for the proposed project. The construction area and total area of disturbance would be larger for Alternative B4 than for the proposed project.[11] Alternative B4 would result in impacts on air quality, and cumulative impacts that are greater than the proposed project. This alternative would not increase capacity of the South Orange County 138-kV system as substantially as the proposed project because a new 230-kV source to South Orange County would not be constructed.[12]

3.4. Alternative C1 – SCE 230-kV Loop-in to Capistrano Substation

Under this alternative, a new double-circuit 230-kV line segment would not be installed between Talega Substation and a location just south of San Juan Hills High School and the Rancho San Juan residential development. The 230-kV line would be approximately 4 miles shorter than the proposed project.[13]

[10] FEIR at 5-8, 5-11, and 5-13.
[11] FEIR at 5-13.
[12] FEIR at 5-15.
[13] FEIR at 5-15.

Alternative C1 would result in impacts on air quality that are less than the proposed project; however, this impact would remain significant under Alternative C1. Alternative C1 would have significant impacts on cultural resources and cumulative impacts, similar to the proposed project. This alternative would increase capacity of the South Orange County 138-kV system similar to the proposed project because a new 230-kV source to South Orange County would be constructed.[14]

3.5. Alternative C2 – SCE 230-kV Loop-in to Capistrano Substation Routing Alternative

Under this alternative, a new double-circuit 230-kV line segment would not be installed between Talega Substation and a location just south of San Juan Creek Road. The 230-kV line would be 4.5 to 5 miles shorter than as proposed. Approximately 18 transmission structures would be installed along transmission line Segment 1a and a section of Segment 1b. The transmission line would be installed in new underground conduit along San Juan Creek Road. This would equate to approximately 7.39 acres of land disturbance compared to the 33.7 acres that would be disturbed if the proposed transmission lines were installed. More land disturbance would occur for trenching along San Juan Creek Road (approximately 1 mile) than along Vista Montana Road (approximately 0.35 miles). This would equate to approximately 6.1 acres of land disturbance along San Juan Creek Road under Alternative C2 and approximately 1.6 acres of land disturbance along Vista Montana Road under the proposed project. With the additional 4.5 acres of land disturbance for trenching along San Juan Creek Road, Alternative C2 would still result in approximately 21.8 fewer acres of land

[14] FEIR at 5-17.

disturbance compared to the proposed project. In addition, helicopter use would not be required for the construction of Alternative C2.[15]

Alternative C2 would result in impacts on air quality that are less than the proposed project; however, these impacts would remain significant under Alternative C2. Alternative C2 would have greater impacts on cultural resources compared to the proposed project. This alternative would have a significant impact on cumulative impacts, similar to the proposed project. This alternative would increase capacity of the South Orange County 138-kV system similar to the proposed project because a new 230-kV source to South Orange County would be constructed.[16]

3.6. Alternative D – SCE 230-kV Loop-in to Reduced-Footprint Substation at Landfill

Under Alternative D, a new double-circuit 230-kV line segment (less than 0.25 miles long) and a new, single-circuit 138-kV line segment (approximately 0.75 miles long) would be constructed. The combined length of transmission line segments to be constructed under this alternative would be approximately 6.8 miles shorter than as proposed. Approximately 8 transmission structures would be installed along transmission line Segment 3 and approximately 0.25 miles of new ROW within Prima Deshecha Landfill. This would equate to approximately 3.3 acres of land disturbance. In addition, the new 230/138/12-kV substation would likely be smaller than the proposed 230/138/12-kV substation because only one 230/138-kV transformer would be installed instead of two, and only one 138/12-kV transformer would be installed instead of three. Space for a spare 230/138-kV transformer and spare 138/12-kV transformer would still be included as proposed.[17]

[15] FEIR at 5-17 and 5-18.
[16] FEIR at 5-19 and 5-20.
[17] FEIR at 5-20.

Alternative D would result in less impacts on air quality than the proposed project; however, impacts on air quality would remain significant under Alternative D. Alternative D would have similar significant impacts on cultural resources. Alternative D would reduce the proposed project's transportation and traffic and cumulative impacts to less than significant. This alternative would have substantially greater impacts on public services. Additionally, the feasibility of SDG&E obtaining the property for this alternative is uncertain as the property is owned and used by the County of Orange for an existing public use. Further, consultation between the applicant and the County of Orange would have to occur to determine the feasibility of this alternative. This alternative would increase capacity of the South Orange County 138-kV system similar to the proposed project because a new 230-kV source to South Orange County would be constructed.[18]

3.7. Alternative E – New 230-kV Talega-Capistrano Line Operated at 138-kV

Under this alternative, San Juan Capistrano Substation would not be constructed, and a new double-circuit 230-kV line segment would not be installed between Capistrano Substation and San Juan Hills High School as proposed. The proposed double-circuit 230-kV line would be constructed between Talega Substation and the San Juan Hills High School and Rancho San Juan residential development area but would be operated at 138-kV rather than 230-kV. The new 230-kV line would be approximately 3 miles shorter than the proposed 230-kV line. The proposed distribution line work would not be required. This would equate to approximately 23.4 acres of land disturbance.[19]

[18] FEIR at 5-23 and 5-24.
[19] FEIR at 5-24.

Alternative E would result in fewer impacts on air quality than the proposed project; however, these impacts would remain significant under Alternative E. Alternative E would reduce the proposed project's cultural resources and cumulative impacts to less than significant. This alternative would not increase capacity of the South Orange County 138-kV system as substantially as the proposed project because a new 230-kV source to South Orange County would not be constructed.

3.8. Alternative F – 230-kV Rancho Mission Viejo Substation

Under Alternative F, a new double-circuit 230-kV line that follows the route of TL13831 would be constructed that is approximately 1 mile shorter than the 230-kV route for the proposed route. New ROW would be required, however, to widen the existing 138-kV ROW between Talega and Rancho Mission Viejo substations (approximately 6.5 miles long and 20 feet wide), which would result in more land disturbance than the propose route within existing ROW. It is assumed that additional land disturbance would be required for the installation of new 138-kV facilities and 138-kV reconductoring to make use of the additional power that would be available from an upgraded 230/138/12-kV Rancho Mission Viejo Substation. In addition, the expansion of Rancho Mission Viejo Substation would require a similar amount of land disturbance compared to the construction of San Juan Capistrano Substation.[20]

Alternative F would result in impacts on air quality that are greater than the proposed project. Impacts on biological resources and land use would be similar to the proposed project. Alternative F would reduce the proposed project's cultural resources and cumulative impacts to less than significant. This alternative would not increase capacity of the South Orange County 138-kV

[20] FEIR at 5-26.

system as substantially as the proposed project because a new 230-kV source to South Orange County would not be constructed.[21]

3.9. Alternative G – New 138-kV San Luis Rey-San Mateo Line and San Luis Rey Substation Expansion

Under Alternative G, SDG&E would expand Capistrano Substation as proposed but would not install the proposed 230-kV components. A similar amount of land disturbance would still occur at the proposed substation site. A new 138-kV line would be constructed between San Luis Rey Substation and San Mateo Substation that would be approximately 12 miles longer than the proposed line between Talega Substation and Capistrano Substation. Instead of the proposed 82 transmission line structures along a 7.8-mile-long route, more than 250 new structures would be installed. This would equate to approximately 102.7 acres of land disturbance.[22]

Alternative G would result in impacts on air quality that are greater than the proposed project. Impacts on biological resources, cultural resources, and land use and planning would be similar to the proposed project. This alternative would not increase capacity of the South Orange County 138-kV system as substantially as the proposed project because a new 230-kV source to South Orange County would not be constructed.[23]

3.10. Alternative J – SCE 230-kV Loop-in to Trabuco Substation

Under this alternative, the SDG&E's 138/12-kV Trabuco Substation would be expanded to a 230/138/12-kV substation. The substation expansion would use an existing 2-acre AT&T parking lot located adjacent to the north side of the

[21] FEIR at 5-28.
[22] FEIR at 5-29.
[23] FEIR at 5-30.

existing Trabuco Substation to accommodate the new 230/138kV equipment. A new 230-kV source of power would be added to the South Orange County 138-kV system by looping Southern California Edison's (SCE's) San Onofre Nuclear Generating Station (SONGS)-Santiago 230-kV transmission system into the Trabuco Substation. This would be accomplished by constructing a new underground double circuit 230-kV line from the north along Camino Capistrano or from the east several hundred feet north of Crown Valley Parkway. The easterly route would require a crossing of I-5, similar to the proposed project. The new underground 230-kV double circuit transmission line would require new ROW under either routing option. Existing infrastructure in the AT&T parking lot would be removed, and a new pad for the 230/138-kV equipment would be established. New equipment would include support structures for the 230-kV double circuit transmission line, a 230-kV bus, two 230-kV circuit breakers, two 230/138-kV air-insulated transformers (one required and one spare), a 138-kV circuit breaker, and a new 80- x 40-foot control building. New substation componentry would be set back from the perimeter of the parcel by at least 20 feet. A small switchyard would be constructed to loop SCE's SONGS-Santiago 230-kV line into the Trabuco Substation. The existing 138/12-kV substation equipment would not be modified, with the exception of connecting the new 138-kV circuit breaker to the existing 138-kV system. The SDG&E South Orange County 138-kV System would not require any reconductoring under this alternative. The Capistrano Substation would not be expanded, but equipment at Capistrano Substation 43 found to be inadequate would be replaced. The distribution circuit 315 (12-kV) would not be relocated.[24]

[24] FEIR at 5-31.

Alternative J would result in fewer impacts on air quality than the proposed project; however, impacts on air quality would remain significant. Alternative J would reduce impacts on cultural resources to less than significant. This alternative would increase capacity of the South Orange County 138-kV system similar to the proposed project because a new 230-kV source to South Orange County would be constructed.[25]

4. Environmentally Superior Alternative

The EIR identifies the No Project Alternative (Alternative A) as the environmentally superior alternative for all environmental resources. The FEIR finds the No Project Alternative would be feasible and would meet most of the basic objectives of the proposed project.[26]

Even when the environmentally superior alternative is the No Project Alternative, CEQA requires the identification of an Environmentally Superior Alternative among the other alternatives (CEQA Guidelines Section 15126.6). Alternative J (SCE 230-kV Loop to Trabuco Substation) was found to be the environmentally superior alternative compared to the proposed project and to the other alternatives because Alternative J would substantially reduce air quality emissions when compared to the proposed project's air emissions and would reduce significant impacts on historic cultural resources to less than significant.

5. Certification of the EIR

Pursuant to CEQA Guidelines § 15090(a), prior to approving a project the lead agency shall certify that the EIR has been completed in compliance with CEQA, that the decision-making body reviewed and considered the information contained in the EIR prior to approving the project, and that the EIR reflects the

[25] FEIR at 5-34.
[26] FEIR at 5-34.

lead agency's independent judgment and analysis. Because we find that No Project is needed, we need not certify the EIR.

6. Project Need

Pub. Util. Code § 1001 conditions a utility's authority to construct or extend its line, plant or system on it having first obtained from the Commission a certificate that the present or future public convenience and necessity require or will require such construction.[27] In addition to the suggested electric service benefits discussed below, SDG&E asserts that its project will increase fire safety within fire prone areas and reduce the number of overhead electric facilities within specific locations along the project route. SDG&E further notes that its project will take place almost entirely within the footprint of existing facilities and will not introduce electric facilities uses where none currently exist. In particular, recreational and park areas within its project site already include extensive overhead electric transmission and distribution facilities because these existing facilities will be replaced with new facilities, its project will not increase or otherwise affect the use of the recreational/park areas.

SDG&E, with CAISO support, asserts that the proposed project is necessary to meet mandatory NERC, WECC, and CAISO reliability standards to avoid service interruptions to South Orange County. SDG&E identifies several areas of concern that it believes must be resolved in order for SDG&E to meet its obligation to serve and maintain reliable customer service in the SDG&E service area.

SDG&E explains that its proposed project will result in substantial electric service and reliability benefits including increased electric network reliability and

[27] § 1002(a) requires the Commission to consider, as a basis for granting a CPCN, community values, recreational and park areas, historical and aesthetic values, and influence on the environment.

the reduction of risk of a potential system wide outage affecting all of SDG&E's customers and substations in the South Orange County (SOC) area. There was significant debate over the course of the proceeding about whether the project is needed based on projected load growth for SOC. It is accepted practice to utilize load forecasts prepared by the California Energy Commission as the basis of demand analysis. With the time that has elapsed since the genesis of this proceeding and its completion, the record is clear that SDG&E's projected load growth in SOC that may have initially driven this project in 2012 has not materialized.[28] Therefore, we find that no project is necessary to accommodate the projected load growth over the ten year forecast period (Scoping Memo Issue 1.e.). We do not reach the question of the specific ten-year projected load growth (Scoping Issue 1.d.) because we find that projected load growth does not drive project necessity.

SDG&E and CAISO assert that a project is still needed to address reliability concerns. The CAISO's reliability concerns relate to at least three issues. First, the CAISO argues that various thermal overloads will develop on distinct facilities over the ten-year planning horizon without the SOCRE Project and many unique contingencies cannot be addressed through a Special Protection System without violating the NERC long-term planning requirements.[29] The CAISO next contends that the South Orange County 138-kV system is a part of the Bulk Electrical System (BES) (rather than a local network) to which the NERC

[28] SJC Opening Brief at 6-7 citing Exhibit CAISO-501 at 3.
[29] CAISO Opening Brief at 4, citing Exhibit CAISO-500, at 10; CAISO Opening Brief at 5, Fn. 35.

reliability standards apply.[30] Finally, the CAISO argues that regardless of whether or not the South Orange County 138-kV facilities are considered BES facilities under NERC, the facilities are under CAISO operational control and the CAISO Planning Standards require the CAISO to apply NERC Transmission Planning (TPL) standards to "facilities with voltages less than 100-kV or otherwise not covered under the NERC Bulk Electric System definition that have been turned over to the [CA]ISO operational control."[31] The CAISO concludes that this means the South Orange County 138-kV system is not a "local network" and should not be excluded from the BES because it transfers bulk power across the interconnected CAISO grid and provides critical reactive power support to voltage and transfer capability in the Southern Orange County and the San Diego import transmission systems.[32]

FRONTLINES disagrees with the CAISO's contentions. Citing the NERC Glossary of Terms, FRONTLINES points out that "Local Networks" are excluded from the definition of a BES, and are thus exempt from NERC reliability standards if they:[33]

1) Operate at less than 300-kV;
2) Distribute power to load;

[30] Specifically, the CAISO notes that the South Orange County 138-kV system is interconnected to the rest of the CAISO-controlled grid through not only the 230/138-kV facilities at Talega but also through the 69-kV facilities from San Luis Rey to Talega, and the South Orange County 138-kV system provides reactive support required to support San Diego import transmission, which is identified as an Interconnection Reliability Operating Limit due to the post-transient voltage instability concern in the SDG&E and LA Basin areas after the SONGS retirement. Also, a 100 MVAR STATCOM (Dynamic Reactive Power Device) is located at the 138-kV Talega bus and a 40 MVAR shunt capacitor (Static Reactive Power Device) is located at Capistrano 138-kV bus. According to the CAISO, pursuant to NERC's Inclusion I5 to the BES definition, both of these devices are BES elements because they support voltages and transfer capability on the 138- and 230-kV systems.

[31] CAISO Opening Brief at 9, citing CAISO Planning Standards (Exhibit ORA-227) at 4.

[32] CAISO Opening Brief at 7.

[33] FRONTLINES Opening Brief at 3, citing the NERC Glossary of Terms at 19-21.

3) Do not transfer bulk power across the interconnected system;
4) Emanate from multiple connections at 100-kV or higher to improve service to retail customers;
5) Do not accommodate bulk power transfer;
6) Do not include generation resources;
7) Do not transfer energy originating outside the network for delivery through the network; and
8) Are not part of a transfer path.

FRONTLINES addresses each of these criteria in turn and concludes that the definition of Local Network is met by the South Orange County system because it:

1) Operates at 138-kV and 12-kV;
2) Only distributes power to load via seven distribution systems;[34]
3) Cannot transfer bulk power across the interconnected system because it is a radial arrangement of distribution substations served solely from a single connection to the CAISO grid.[35]
4) Emanates from multiple connections between seven 138-kV distribution substations;[36]
5) Cannot accommodate bulk power transfer (and has no impact on the CAISO grid);[37]
6) Has no generation;[38]
7) Does not transfer energy originating outside the 138-kV distribution system through the system (aka "loop" flow) because South Orange County itself has only one point of connection (Talega) to external generation; and

[34] FRONTLINES Opening Brief at 3, citing Exhibit SDG&E-1.3R page 8 at 9.
[35] Exhibit SDG&E-1.3R at 32 and 41.
[36] Exhibit SDG&E-1.3R at 8.
[37] CAISO response to FRONTLINES discovery request, Exhibit FRONTLINES-401C at footnote 17.
[38] Tr. 1277 at 2.

8) It is not part of either WECC Path 43 or WECC Path 44, though it draws power from WECC Path 44 through a 138-kV connection.[39]

FRONTLINES argues that the definition of the BES provided by NERC makes clear that the South Orange County 138-kV network of distribution substations is a Local Network that is not part of the BES.[40] Specifically, according to FRONTLINES, the inclusionary provisions of the BES definition similarly address elements and devices (such as the CAISO and SDG&E cite), the plain and unambiguous language of these inclusionary provisions makes clear that they apply only to the devices specified and do not apply to the elements connected to such devices.[41] FRONTLINES concludes that the 138-kV lines and seven distribution substations that comprise SDG&E's South Orange County system are specifically not part of the BES and are therefore not subject to NERC reliability standards TPL-002-02b, TPL-003-0b, and TPL-004-0a.

For its third concern, the CAISO contends that regardless of whether or not the South Orange County 138-kV facilities would be a Local Network under NERC, it is classified as part of the BES because the facilities are under CAISO operational control and the CAISO Planning Standards require the CAISO to apply NERC TPL standards to "facilities with voltages less than 100-kV or otherwise not covered under the NERC Bulk Electric System definition that have been turned over to the [CA]ISO operational control."[42] FRONTLINES contests this point, arguing that even if the South Orange County system were subject to the application of NERC standards, footnote B of TPL-002-0b would allow controlled load shedding of local network customers following the loss of an element supplying the affected area.[43]

[39] FRONTLINES Opening Brief at 3, citing Exhibit SDG&E-4C at 31.
[40] FRONTLINES Opening Brief at 3, citing Attachment 26 in Exhibit SDG&E-3.2C.
[41] FRONTLINES Opening Brief at 3.
[42] CAISO Opening Brief at 3.
[43] Exhibit FRONTLINES-400.1C at 3.

In its January 11, 2016 Opening Brief the CAISO points out that "[a]s of January 1, 2016, NERC TPL-001-4 is the enforceable, governing standard for transmission system planning performance requirements."[44] According to the CAISO, the new NERC standard does not allow non-consequential load loss after a single contingency event in the long-term transmission planning horizon:

> In footnote 12, which replaces the prior footnote B, the NERC standard notes that non-consequential load loss may be used if it is used only within the "Near-Term Transmission Plan Horizon" (i.e., years one through five) and is vetted through an "open and transparent stakeholder process."[45]

The CAISO thus argues that FRONTLINES' contention that footnote B allows for load loss after a single event is moot because the prior standard has been entirely replaced by NERC TPL-001-4 and "footnote B" no longer exists.

When TPL-001-4 took effect in January 2016, the former footnote B that potentially provides an exemption for local area networks was removed. Under the new standard most single contingency events are now subject to the new footnote 12 which provides:

> An objective of the planning process should be to minimize the likelihood and magnitude of non-consequential load loss following planning events. In limited circumstances, non-consequential load loss may be needed throughout the planning horizon to ensure that BES performance requirements are met. However, when Non-Consequential Load Loss is utilized under footnote 12 within the near-term transmission planning horizon to address BES performance requirements, such interruption is limited to circumstances where the non-consequential load loss meets the conditions shown in Attachment 1. In no case can the planned Non-Consequential load loss under footnote 12 exceed 75 MW for US registered entities.

[44] CAISO Opening Brief at 7.
[45] CAISO Opening Brief at 6.

This new language limits non-consequential load-drop under single contingencies to 75 MW. However, FRONTLINES points out that Footnote 12's 75 MW limitation on load shedding only applies to non-consequential load, and that Page 8 of NERC Standard TPL-004-1 contains a new footnote b providing that "consequential load loss as well as generation loss is acceptable as a consequence of any event excluding P0."[46]

Furthering their argument, FRONTLINES states "If SOC were part of the BES, then SOC load loss occurring under a single P1 contingency could be categorized as 'non-consequential' load loss, and therefore limited to 75 MW 'near term' in accordance with page 18 of CAISO's current planning standard. However, South Orange County is radially served by a 138kV local network via a single connection to the CAISO grid, and other than the 230kV bus and other equipment at Talega substation, SOC is not part of the Bulk Electric System."[47] Because SOC is controlled by CAISO, it is subject to CAISO's planning standards, and by extension, the NERC standards.[48] Additionally, the CAISO's planning standards allow for up to 250 MW of consequential load shedding, or load that is directly connected to a faulted element.[49]

While the CAISO has responsibility to ensure the reliability of the State's electrical system pursuant to Pub. Util. Code § 345, reliability planning and deciding that a particular transmission project should be built are two vastly different issues. Pub. Util. Code § 1001 places an ongoing responsibility on this Commission to evaluate the public convenience and necessity of proposed

[46] FRONTLINES Opening Comments on the Proposed Decision at 2.
[47] FRONTLINES Opening Comments on the Proposed Decision at 3.
[48] FRONTLINES Opening Comments on the Proposed Decision at 3.
[49] FRONTLINES Opening Comments on the Proposed Decision at 3, citing Page 6 of CAISO's Current Planning Standard effective April 15, 2015. We take official notice of the CAISO Planning Standards set forth at http://www.caiso.com/Documents/FinalISOPlanningStandards-April12015_v2.pdf.

transmission projects, and therefore we independently assess the record developed in this proceeding to determine whether projects or alternatives are appropriate on the basis of reliability, as well as safety and economics.

We find based on the testimony presented by FRONTLINES over the course of this proceeding and based on the NERC Glossary of Terms[50] that the South Orange County system is not part of the Bulk Electric System as defined by NERC, yet we acknowledge that the SOC system is under the CAISO's control and by extension the CAISO's planning standards which apply the NERC TPL-001-4 standard. As the SOC distribution substations are radially served from Talega substation and are not part of the BES, we find that any load loss during the single contingency maintenance outage scenarios at Talega (described in Exhibit CAISO-502 at 6) is a direct consequence of the faulted element (consequential load loss), and is therefore acceptable under the current NERC standard TPL-001-4, under footnote b on Page 8. While the CAISO does find certain Category C contingencies remain, The City of San Juan Capistrano points out that not only is non-consequential load shedding permitted by NERC and CAISO standards during Category C contingencies, the probability of the outage conditions studied by SDG&E and CAISO is approximately 0.00001%[51]. Thus we find there would be no violation of NERC standards, even if the standards were mandatory in this situation.

In testimony, SDG&E admitted that the CAISO's planning standards impose reliability standards stricter than those mandated by NERC.[~~51~~52] Indeed, the CAISO's self-imposed 250 MW single contingency, consequential loss of load restriction is above and beyond that required by NERC. If the CAISO's 250 MW

[50] Exhibit SDG&E- 3.2C, Attachment 26
[51] Opening Comments of the City of San Juan Capistrano on the Revised PD, at 5
[~~51~~52] Tr. 143, 1-4.

standard is violated in South Orange County, it is not in and of itself a NERC violation even if the NERC transmission planning standards applied to the SOC system. For these reasons, we find that there is no need for a project from a reliability standpoint.

7. Comments on Proposed and Alternate Decisions

The proposed decision of the ALJ and the alternate decision of President Picker in this matter were mailed to the parties in accordance with § 311 of the Public Utilities Code and comments were allowed under Rule 14.3 of the Commission's Rules of Practice and Procedure. SDG&E, ORA, SJC, FRONTLINES, and CAISO filed comments on the proposed and alternate decisions on October 17, 2016, reply comments were filed by the same parties on October 24, 2016.

After review of the comments, the Proposed Decision was substantially modified to find that no project was needed and was reissued in its entirety on ~~___~~November 14, 2016. The proposed and alternate decisions were recirculated to parties for additional review and comment. Comments were filed by ~~___ on ___~~SDG&E, ORA, SJC, FRONTLINES, and CAISO on December 5, 2016 and reply comments were filed by ~~___ on ___~~SDG&E, ORA, SJC, FRONTLINES, and CAISO on December 12, 2016.

8. Assignment of Proceeding

President Michael Picker is the assigned Commissioner and Darwin E. Farrar is the assigned ALJ in this proceeding.

Findings of Fact

1. Demand forecasts do not demonstrate need for a project in South Orange County.

2. The South Orange County 138-kV facilities are a local network under operational control of the CAISO.

3. The South Orange County 138-kV system ~~does~~is not currently exempted from the BES, but it appears to not meet the NERC definition of BES.

4. NERC reliability standards apply to the BES on a mandatory basis.

5. CAISO has applied the NERC TPL standards to facilities that are under its operational control through its Planning Standards.

6. CAISO Planning Standards impose reliability standards stricter than those mandated by NERC.

7. Loss of load due to a contingency during a maintenance outage at Talega is a direct consequence of the faulted element which is defined as consequential load loss.

Conclusions of Law

1. Consequential load loss at a level consistent with a contingency during a maintenance outage at Talega is acceptable under the current NERC standard TPL-001-4 under footnote b.

2. Violation of CAISO's self-imposed 250 MW restriction on consequential loss of load is not in and of itself a NERC violation.

3. No project is necessary based on existing demand forecasts and planning standards.

4. Since no project is needed, certification of the EIR is not necessary.

5. Any pending motions should be deemed denied.

O R D E R

IT IS ORDERED that:

1. San Diego Gas & Electric Company is denied a certificate of public convenience and necessity to construct the South Orange County Reliability Enhancement Project.
2. All pending motions are deemed denied.
3. Application 12-05-020 is closed.

This order is effective today.

Dated _____, at San Francisco, California.

Document comparison by Workshare Compare on Tuesday, December 13, 2016 8:49:11 AM

Input:	
Document 1 ID	file://d:\jt2\Desktop\wsc A1205020 Farrar Comment Dec Rev 1 6-1-16.docx
Description	wsc A1205020 Farrar Comment Dec Rev 1 6-1-16
Document 2 ID	file://d:\jt2\Desktop\wsc A1205020 Farrar Agenda Dec Rev. 2 6-1-16.docx
Description	wsc A1205020 Farrar Agenda Dec Rev. 2 6-1-16
Rendering set	Standard

Legend:	
Insertion	
~~Deletion~~	
~~Moved from~~	
Moved to	
Style change	
Format change	
~~Moved deletion~~	
Inserted cell	
Deleted cell	
Moved cell	
Split/Merged cell	
Padding cell	

Statistics:	
	Count
Insertions	27
Deletions	23
Moved from	0
Moved to	0
Style change	0
Format changed	0
Total changes	50